



State of Utah

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Lieutenant Governor

Department of Environmental Quality

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Acting Executive Director

DIVISION OF AIR QUALITY
Cheryl Heying
Director

DAQE-IN0141550001-09

January 15, 2009

Earl Davis
Sunroc Corporation
180 North 300 East
St. George, UT 84770

Dear Mr. Davis:

Re: Intent to Approve: New Aggregate Processing Facility
Utah County; CDS B; MACT (Part 63), NSPS (Part 60), Nonattainment Area
Project Number: N014155-0001

The attached document is the Intent to Approve for the above-referenced project. The Intent to Approve is subject to public review. Any comments received shall be considered before an Approval Order is issued. The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an Approval Order. An invoice will follow upon issuance of the final Approval Order.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. The project engineer for this action is Mr. Alan Humpherys, who may be reached at (801) 536-4142.

Sincerely,

John T. Blanchard, Manager
Minor New Source Review Section

JTB:AH:sa

cc: Utah County Health Department

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

INTENT TO APPROVE: New Aggregate Processing Facility

Prepared By: Mr. Alan Humpherys, Engineer

Phone: (801) 536-4142

Email: ahumpherys@utah.gov

INTENT TO APPROVE NUMBER

DAQE-IN0141550001-09

Date: January 15, 2009

Salem Aggregate Facility

Source Contact:

Mr. Brian Harris

Environmental Contact

Phone: (801) 802-6954

**John T. Blanchard, Manager
Minor New Source Review Section
Utah Division of Air Quality**

ABSTRACT

Sunroc Corporation has submitted a NOI to construct a new aggregate processing facility near Salem Utah. The aggregate facility will have a main crushing and screening plant and a trackscreen plant. Generators will supply power to the two plants. The facility will produce up to 1,375,000 tons of aggregate material. This source is a Title V area source.

The facility is located in Utah County, which is a non-attainment area for PM_{10} . Because of the increase in emissions, Sunroc Corporation triggers the requirement to obtain PM_{10} emission offset credits on a 1.2 to 1 basis, as per UAC R307-403-5. PM_{10} emissions offsets of 75.65 tons were satisfied as required. The purchase of the acquired offsets is referenced in DAQE-045-08.

The potential to emit totals for the facility, in tons per year, will be as follows: $PM_{10} = 23.43$, $NO_x = 38.91$, $SO_2 = 0.70$, $CO = 8.90$, $VOC = 1.09$, $HAPs = 0.02$

The NOI for the above-referenced project has been evaluated and has been found to be consistent with the requirements of UAC R307. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notification of the intent to approve will be published in the The Daily Herald on January 20, 2009. During the public comment period the proposal and the evaluation of its impact on air quality will be available for the public to review and provide comment. If anyone so requests a public hearing, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated. The proposed conditions of the AO may be changed as a result of the comments received.

Name of Permittee:

Sunroc Corporation
180 North 300 East
St. George, UT 84770

Permitted Location:

Sunroc Corporation: Salem Aggregate Facility
790 South 1700 East
Salem, UT 84653

UTM coordinates: 445,420 m Easting, 4,432,580 m Northing

SIC code: 1442 (Construction Sand & Gravel)

Section I: GENERAL PROVISIONS

- I.1 All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
- I.2 The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]

- I.3 Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
- I.4 All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401]
- I.5 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
- I.6 The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring. [R307-150]
- I.7 The owner/operator shall comply with UAC R307-107. General Requirements: Unavoidable Breakdowns. [R307-107]

Section II: SPECIAL PROVISIONS

II.A The approved installations shall consist of the following equipment:

- II.A.1 **Aggregate Processing Plant & Track Screen Plant**
- II.A.2 **One (1) Track Screen**
Rated Capacity: 550 tons per hour
- II.A.3 **One (1) Track Screen Generator**
Power: 125 hp
Fuel: Diesel Fuel
- II.A.4 **One (1) Electrical Generator**
Power: 1,216 hp
Fuel: Diesel Fuel
- II.A.5 **One (1) 12,000 gallon Off-Road Diesel Storage Tank**
Tank Volume: 12,000 gallons
Contents: Off-Road Diesel Fuel
- II.A.6 **One (1) 1,000 gallon Diesel Storage Tank**
Tank Volume: 1,000 gallons
Contents: Diesel Fuel

II.A.7 **One (1) 1,000 gallon Off-Road Diesel Storage Tank**

Tank Volume: 1,000 gallons

Contents: Off-Road Diesel Fuel

II.A.8 **Four (4) Crushers**

Rated Capacity: 550 tons per hour each

II.A.9 **Two (2) 1,000 tph Screens**

Rated Capacity: 1,000 tons per hour each

II.A.10 **Two (2) 550 tph Screens**

Rated Capacity: 550 tons per hour each

II.A.11 **Various Conveyors and Feeders**

II.B Requirements and Limitations

II.B.1 **The Aggregate Processing Facility shall be subject to the following**

II.B.1.a Sunroc Corporation shall notify the Executive Secretary in writing when the installation of the equipment listed in this AO has been completed and is operational. To ensure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If the construction and/or installation has not been completed within 18 months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO. [R307-401-18]

II.B.1.b The owner/operator shall not produce more than 1,375,000 tons of aggregate material, including bankrun material, per rolling 12-month period. [R307-401]

II.B.1.b.1 To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of production shall be kept for all periods when the plant is in operation. Production shall be determined by customer sales records or belt scale records. The records of production shall be kept on a daily basis. [R307-401]

II.B.1.c Unless otherwise specified in this AO, the owner/operator shall not allow visible emissions from any source on site to exceed 20 percent opacity. [R307-305]

II.B.1.c.1 Unless otherwise specified in this AO, opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-305]

II.B.2 **The Bulldozing Operations on site shall be subject to the following**

II.B.2.a The hours of operation for all bulldozers at the facility shall not exceed 5,000 hours combined per rolling 12-month period. [R307-401]

II.B.2.a.1 To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. The hours of operation of each bulldozer shall be added together to determine the total hours. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log. [R307-401]

II.B.3 **The Paved Haul Roads on site shall be subject to the following**

II.B.3.a The owner/operator shall vacuum sweep and flush with water all the paved haul roads on site to maintain opacity limits listed in this AO. If the temperature is below freezing, the owner/operator shall continue to vacuum sweep the road but may stop flushing the paved haul roads with water. If the haul roads are covered with snow or ice, the owner/operator may stop vacuum sweeping the paved haul roads and flushing the paved haul roads with water. [R307-401]

II.B.3.a.1 Records of vacuum sweeping and water application shall be kept for all periods when the plant is in operation. The records shall include the following items:

- A. Date and time treatments were made
- B. Number of treatments made and quantity of water applied
- C. Rainfall amount received, if any
- D. Records of temperature, if the temperature is below freezing
- E. Records shall note if the paved haul roads are covered with snow or ice. [R307-401]

II.B.4 **The Unpaved Haul Roads on site shall be subject to the following**

II.B.4.a The owner/operator shall cover all unpaved haul roads and wheeled-vehicle operational areas with road base material and shall use water application to maintain opacity limits listed in this AO. If the temperature is below freezing, the owner/operator may stop applying water to the unpaved haul roads and wheeled-vehicle operational areas. [R307-401]

II.B.4.a.1 Records of water application shall be kept for all periods when the plant is in operation. The records shall include the following items:

- A. Date and time treatments were made
- B. Number of treatments made and quantity of water applied

- C. Rainfall amount received, if any
- D. Records of temperature, if the temperature is below freezing. [R307-401]

II.B.5 All Haul Roads and Fugitive Dust Sources on site shall be subject to the following

- II.B.5.a The owner/operator shall abide by a fugitive dust control plan acceptable to the Executive Secretary for control of all dust sources associated with the Salem Aggregate Processing Plant. The owner/operator shall submit a fugitive dust control plan to the Executive Secretary, attention: Compliance Section, for approval within 30 days of the date of this AO. [R307-309]
- II.B.5.b The owner/operator shall not allow visible emissions from haul roads and fugitive dust sources to exceed 20 percent opacity on site and 10 percent at the property boundary. [R307-309]
- II.B.5.b.1 Visible emission determinations for fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Visible emissions shall be measured at the densest point of the plume but at a point not less than 1/2 vehicle length behind the vehicle and not less than 1/2 the height of the vehicle. [R307-309]
- II.B.5.c The owner/operator shall install water sprays on all conveyor drop points on site. The owner/operator shall apply water from conveyor sprays and water trucks to all storage piles on site to control fugitive emissions. Sprays shall operate as required to ensure the opacity limits listed in this AO are not exceeded. The owner/operator may stop spraying the storage piles with water if the temperature is below freezing. [R307-401]
- II.B.5.d The owner/operator shall abide by all applicable requirements of R307-309 for Fugitive Emission and Fugitive Dust sources on site. [R307-309]

II.B.6 The Track Screen Generator on site shall be subject to the following

- II.B.6.a The track screen generator shall not exceed 500 hours of operation per rolling 12-month period. [R307-401]
- II.B.6.a.1 To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log. [R307-401]

II.B.7 The Main Plant Electrical Generator on site shall be subject to the following

- II.B.7.a The main aggregate plant generator shall not exceed 2,600 hours of operation per rolling 12-month period. [R307-401]

- II.B.7.a.1 To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log. [R307-401]
- II.B.8 **All Crushers on site shall be subject to the following**
- II.B.8.a The owner/operator shall not allow visible emissions from any crusher on site to exceed 15 percent opacity. [40 CFR 60 Subpart OOO]
- II.B.8.b The owner/operator shall install water sprays on all crushers on site to control fugitive emissions. Sprays shall operate as required to ensure the opacity limits listed in this AO are not exceeded. The owner/operator may stop the water sprays if the temperature is below freezing. [R307-401]
- II.B.9 **All Screens on site shall be subject to the following**
- II.B.9.a The owner/operator shall not allow visible emissions from any screen on site to exceed 10 percent opacity. [40 CFR 60 Subpart OOO]
- II.B.9.b The owner/operator shall install water sprays on all screens on site to control fugitive emissions. Sprays shall operate as required to ensure the opacity limits listed in this AO are not exceeded. The owner/operator may stop the water sprays if the temperature is below freezing. [R307-401]
- II.B.10 **All Conveyors on site shall be subject to the following**
- II.B.10.a The owner/operator shall not allow visible emissions from any conveyor transfer point on site to exceed 10 percent opacity. [40 CFR 60 Subpart OOO]
- II.B.10.b The owner/operator shall not allow visible emissions from any conveyor drop point on site to exceed 20 percent opacity. [R307-309]
- II.B.10.c The owner/operator shall install water sprays on all unenclosed conveyor transfer points on site to control fugitive emissions. Sprays shall operate as required to ensure the opacity limits listed in this AO are not exceeded. The owner/operator may stop the water sprays if the temperature is below freezing. [R307-401]
- II.B.11 **All Stationary Engines on site shall be subject to the following**
- II.B.11.a The owner/operator shall not allow visible emissions from any stationary diesel engine on site to exceed 20 percent opacity. [R307-305]
- II.B.11.b The owner/operator shall use #1, #2 or a combination of #1 and #2 diesel fuel in the diesel generators. [R307-401]

- II.B.11.c The sulfur content of any fuel oil or diesel burned in the generators shall not exceed 0.05 percent by weight. [R307-401]
- II.B.11.c.1 The sulfur content shall be determined by ASTM Method D2880-71, D4294-89, or approved equivalent. Certification of used oil shall be either by the owner/operator's own testing or by test reports from the fuel oil or diesel fuel marketer. [R307-203]
- II.B.11.d The owner/operator shall abide by all applicable provisions of 40 CFR 63, MACT Standards Subpart A (General Provisions), 63.1 to 63.16 and Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines), 40 CFR 63.6580 to 63.6675 for all new, reconstructed, or existing (as defined in Subpart ZZZZ) stationary diesel engines on site. [40 CFR 63 Subpart ZZZZ]
- II.B.11.e The owner/operator shall abide by all applicable provisions of 40 CFR 60, NSPS Subpart A (General Provisions), 40 CFR 60.1 to 60.18 and Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines), 40 CFR 60.4200 to 60.4219 for all stationary diesel engines on site as specified in 40 CFR 60.4200(a). [40 CFR 60 Subpart IIII]
- II.B.12 **All Crushers, Screens, and Conveyors on site shall be subject to the following**
- II.B.12.a Initial visible observations of opacity shall be conducted for all crushers, screens, and conveyor transfer points. Observations shall meet the opacity limitations listed in this AO. [40 CFR 60 Subpart OOO]
- II.B.12.a.1 The owner/operator shall conduct initial observations of opacity in accordance with 40 CFR 60, Appendix A, Method 9. Initial visible emission observations shall consist of 30 observations of six minutes each in accordance with 40 CFR 60.11(b). The duration of observations may be reduced to comply with 40 CFR 60.675(c)(3) or 40 CFR 60.675(c)(4). A certified observer must be used for these observations. [40 CFR 60 Subpart OOO]
- II.B.12.b All applicable provisions of 40 CFR 60, NSPS Subpart A (General Provisions), 40 CFR 60.1 to 60.18 and Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants), 40 CFR 60.670 to 60.676 shall apply to all crushers, screens, and conveyors on site. [40 CFR 60 Subpart OOO]

Section III: APPLICABLE FEDERAL REQUIREMENTS

In addition to the requirements of this AO, all applicable provisions of the following federal programs have been found to apply to this installation. This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

MACT (Part 63), A: General Provisions
 MACT (Part 63), ZZZZ: Recipro. Int. Comb Engine (RICE)
 NSPS (Part 60), A: General Provisions
 NSPS (Part 60), IIII: Stationary Comp/Ignit R.I.C.E
 NSPS (Part 60), OOO: NonmetallicMineral ProcessingPlnts

PERMIT HISTORY

The final AO will be based on the following documents:

Is Derived From	Additional Information dated January 8, 2009
Is Derived From	Additional Information dated December 16, 2008
Is Derived From	Additional Information dated December 4, 2008
Is Derived From	NOI Meeting dated October 29, 2008
Is Derived From	Additional Information dated October 20, 2008
Is Derived From	Additional Information dated September 24, 2008
Is Derived From	Additional NOI Information dated September 10, 2008
Is Derived From	Additional NOI Information dated August 27, 2008
Is Derived From	Initial NOI dated June 17, 2008

ACRONYMS

The following lists commonly used acronyms and their associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
ATT	Attainment Area
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by EPA to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CO	Carbon monoxide
COM	Continuous opacity monitor
DAQ	Division of Air Quality (typically interchangeable with UDAQ)
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
MACT	Maximum Achievable Control Technology
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO _x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM ₁₀	Particulate matter less than 10 microns in size
PM _{2.5}	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO ₂	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
UAC	Utah Administrative Code
UDAQ	Utah Division of Air Quality (typically interchangeable with DAQ)
VOC	Volatile organic compounds